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EXAMINER

ZHENG, JACKY X

ART UNIT	PAPER NUMBER
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2625

NOTIFICATION DATE	DELIVERY MODE
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ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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Office Action Summary	Application No. 10/607,057	Applicant(s) DE GRAAFF ET AL.	
	Examiner JACKY X. ZHENG	Art Unit 2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 April 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on June 27, 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>4/22/2008</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This is the office action based on a request for continued examination under 37 CFR 1.114 filed on April 22, 2008.
2. **Claims 1, 6 and 17** have been amended.
3. **Claims 1-18** are currently pending.

Request for Continued Examination (RCE)

4. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on April 22, 2008 has been entered.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
6. **Claims 1-18** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
7. The term "*directly*" in each of claims 1, 6 and 17 is a relative term which renders the claim indefinite. The term "*directly*" is not defined by the claim with any sufficient description depicting such a relative limitation, the specification does not provide a standard for ascertaining

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the requisite degree, and therefore the scope of such a relative limitation is unable to be distinctly determined. This issue also affects the corresponding dependent claims 2-5, 7-16 and 18.

Further clarification in the claims is suggested.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. **Claims 1-2 and 6-10** are rejected under 35 U.S.C. 103(a) as being unpatentable over **EP 0589724 A2** (as admitted by Applicant in i.e. Para. [004] and [005] of Specification; instant prior art published on March 30, 1994, hereinafter as “**Searby**”) and further in view of **Liu et al.** (US Patent 7,302,118).

With regard to claims 1 and 2, the claim is drawn to an image scanning and processing system. Applicant's admission of prior art of following discussed limitations over **Searby** are evidenced in Applicant's original disclosure, such as in Para. [004] -[005], discloses: “checking whether the scan resolution is high enough to show all the detail in critical region”, “operator be able to select certain regions in the scanned images”, and “able to view them at the resolution used to scan the original” **are known** from **EP 0589724 (“Searby”)**, and further discloses that this publication further disclose the limitations such as “electronic image processing system” with “storing unit”, “a viewing store”, “a monitor” for displaying, and image data being “down converted”, then “written to a destination area” performed by “the control processor” (*See*

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Specification of instant Application, i.e. Para. [004] & [005]; also in Searby, i.e. Figure 1 and Claims 1 and 15).

Searby does not *explicitly* disclose the limitation of extracting data encoding the preview image (or thumbnail image) directly from the stream of data.

However, Liu et al. discloses an invention relates to a system and method for transforming a main image of a digital image, such as one stored in the EXIF (Exchangeable Image File) format, updating the metadata, including the thumbnail image, to correspond to the transformed main image (*see Liu et al., i.e. "Abstract"*). In details, Liu et al. specifically disclose the limitation of extracting thumbnail image, metadata, and etc. from EXIF data stream (*see Liu et al., i.e. Figure 4, Steps 220-222; also Fig. 3 and col. 6, ln 35-64*). More specifically, “a decoder object 212” (*in Fig. 3*) extracts from the EXIF stream 220 a main image, metadata, and thumbnail information, further detecting whether the thumbnail image extracted is in the JPEG compressed format in Step 223 (*in Fig. 4*).

Therefore it would have been obvious to one of ordinary skill in the art at the time of invention to have modified Searby to include the limitation of extracting data encoding the preview image (or thumbnail image) directly from the stream of data taught by Liu et al. It would have been obvious to one of ordinary skill in the art at the time of invention to have modified Searby by the teachings of Liu et al. to include the limitation of extracting data encoding the preview image (or thumbnail image) directly from the stream of data taught by Liu et al., thereby obtaining “the thumbnail representation associated with the main image remains unchanged...” (*col. 2, ln 8-9*) and “a system and method for properly transforming a digital image ... such that

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the transformed metadata accurately reflects transformation made to the main image” (*col. 2, In 32-37*).

With regard to claims 6-7, 8-10 and 17, the claims are drawn to a method of scanning and processing an image and a method of selecting one of a plurality of master file. Applicant's admission of prior art of following discussed limitations over Searby are evidenced in Applicant's original disclosure, such as in Para. [004] -[005], discloses: “checking whether the scan resolution is high enough to show all the detail in critical region”, “operator be able to select certain regions in the scanned images”, and “able to view them at the resolution used to scan the original” are known from EP 0589724 (“Searby”), and further discloses that this publication further disclose the limitations such as “electronic image processing system” with “storing unit”, “a viewing store”, “a monitor” for displaying, and image data being “down converted”, then “written to a destination area” performed by “the control processor” (*See Specification of instant Application, i.e. Para. [004] & [005]; also in Searby, i.e. Figure 1 and Claims 1 and 15*).

Searby does not *explicitly* disclose the limitation of extracting data encoding the preview image (or thumbnail image) directly from the stream of data.

However, Liu et al. discloses an invention relates to a system and method for transforming a main image of a digital image, such as one stored in the EXIF (Exchangeable Image File) format, updating the metadata, including the thumbnail image, to correspond to the transformed main image (*see Liu et al., i.e. "Abstract"*). In details, Liu et al. specifically disclose the limitation of extracting thumbnail image, metadata, and etc. from EXIF data stream (*see Liu et al., i.e. Figure 4, Steps 220-222; also Fig. 3 and col. 6, In 35-64*). More specifically, “a decoder object 212” (*in Fig. 3*) extracts from the EXIF stream 220 a main image, metadata, and

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thumbnail information, further detecting whether the thumbnail image extracted is in the JPEG compressed format in Step 223 (*in Fig. 4*).

Therefore it would have been obvious to one of ordinary skill in the art at the time of invention to have modified Searby to include the limitation of extracting data encoding the preview image (or thumbnail image) directly from the stream of data taught by Liu et al. It would have been obvious to one of ordinary skill in the art at the time of invention to have modified Searby by the teachings of Liu et al. to include the limitation of extracting data encoding the preview image (or thumbnail image) directly from the stream of data taught by Liu et al., thereby obtaining “the thumbnail representation associated with the main image remains unchanged...” (*col. 2, ln 8-9*) and “a system and method for properly transforming a digital image ... such that the transformed metadata accurately reflects transformation made to the main image” (*col. 2, ln 32-37*).

With regard to claim 15, the claim is drawn to the method according to claim 6, further comprising: image-processing the stream of data before creation of the preview image (*see Liu et al. i.e. Fig. 5, Step 274, "lossless transformation on main image"*).

10. **Claims 3, 11 and 18** are rejected under 35 U.S.C. 103(a) as being unpatentable over Searby and Liu et al. as applied to claims 1-2, 6-10, 15 and 17 above, and further in view of Patton et al. (U.S. Patent 6,795,209).

With regard to claim 3, the claim is drawn to the system according to claim 2, wherein the display unit provides a selection frame with which the user makes the user's selection of the section, the selection frame being resizable and movable.

Searby and Liu et al. do not *explicitly* disclose the limitations of “selection frame” being “resizable” and “movable”.

However, Patton et al. disclose the limitations of having a user interface for making a selection of a interested image, and capable of allowing the selection to be “resizable” and “movable” (*See i.e. Figure 7, and Column 8, lines 38-59*).

Therefore it would have been obvious to one of ordinary skill in the art at the time of invention to have modified the teachings of Searby and Liu et al. It would have been obvious to one of ordinary skill in the art at the time of invention to have to include the limitations of “selection frame” being “resizable” and “movable” taught by Patton et al. modified the teachings of Searby and Liu et al. by the teachings of Patton et al. to include the limitations of “selection frame” being “resizable” and “movable” taught by Patton et al. *for allowing the easier accesses of modification of the images for the customers (See “Background of Invention” in Patton et al.)*.

With regard to claim 18, the claim is drawn to the system according to claim 1, further comprising an inkjet print device for printing the preview image and/or the scanned image (*See Patton et al., i.e. Figure 3A, Part 44, a digital output device; column 7, lines 29-31, discloses that “the digital output device can also be an inkjet printer such as Hewlett Packard DeskJet 870xi*).

With regard to claim 11, the claim is drawn to the method according to claim 8, further comprising: providing a selection frame in the survey view, wherein an operator selects a region of interest by sizing and positioning the selection frame in the survey view.

Searby and Liu et al. do not *explicitly* disclose the limitations of “selection frame” being “resizable” and “movable”.

However, Patton et al. disclose the limitations of having a user interface for making a selection of a interested image, and capable of allowing the selection to be “resizable” and “movable” (*See i.e. Figure 7, and Column 8, lines 38-59*).

Therefore it would have been obvious to one of ordinary skill in the art at the time of invention to have modified the teachings of Searby and Liu et al. to include the limitations of “selection frame” being “resizable” and “movable” taught by Patton et al. It would have been obvious to one of ordinary skill in the art at the time of invention to have modified the teachings of Searby and Liu et al. by the teachings of Patton et al. to include the limitations of “selection frame” being “resizable” and “movable” taught by Patton et al. *for allowing the easier accesses of modification of the images for the customers (See “Background of Invention” in Patton et al.)*.

11. **Claims 4 and 12-14** are rejected under 35 U.S.C. 103(a) as being unpatentable over Searby and Liu et al. as applied to claims 1-2, 6-10, 15 and 17 above, and further in view of Zhou (U.S. Pub. 2002/0015447).

With regard to claim 4, the claim is drawn to system according to claim 2, wherein the selected section of the preview image is converted to a different data format before being displayed.

Searby and Liu et al. do not *explicitly* disclose the limitations of converting the data format before previewing or being display.

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However, Zhou discloses the limitations of converting of data format of the data collected by CCD and converted the data to NTSC format for displaying on the LCD screen (*See Zhou, Paragraph [0040]*).

Therefore it would have been obvious to one of ordinary skill in the art at the time of invention to have modified the teachings of Searby and Liu et al. to include the limitations of converting the data format before previewing or being display taught by Zhou. It would have been obvious to one of ordinary skill in the art at the time of invention to have modified the teachings of Searby and Liu et al. by the teachings of Zhou to include the limitations of converting the data format before previewing or being display taught by Zhou, *for proper previewing the image on LCD or TV (See Zhou, Paragraph [0040])*.

With regard to claim 12, the claim is drawn to the method according to claim 10, wherein the part of the scanned image representing the region of interest is converted to a different data format before being displayed.

Searby and Liu et al. do not *explicitly* disclose the limitations of converting the data format before previewing or being display.

However, Zhou discloses the limitations of converting of data format of the data collected by CCD and converted the data to NTSC format for displaying on the LCD screen (*See Zhou, Paragraph [0040]*).

Therefore it would have been obvious to one of ordinary skill in the art at the time of invention to have modified the teachings of Searby and Liu et al. to include the limitations of converting the data format before previewing or being display taught by Zhou. It would have

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been obvious to one of ordinary skill in the art at the time of invention to have modified the teachings of Searby and Liu et al. by the teachings of Zhou to include the limitations of converting the data format before previewing or being display taught by Zhou, *for proper previewing the image on LCD or TV (See Zhou, Paragraph [0040])*.

With regard to claim 13, the claim is drawn to the method according to claim 12, wherein the part of the scanned image representing the region of interest is compressed when converted to the different data format and decompressed before being displayed (*see Liu et al. i.e. Fig. 3 and 4, "decoder object", "encoder object", "convert thumbnail data to JPEG compressed format*).

With regard to claim 14, the claim is drawn to the method according to claim 13, wherein the part of the scanned image representing the region of interest is chosen to be larger than a size leading to compression artifacts (*see Application Specification, i.e. Para. [004], admitted prior art, "it may be desirable, for instance to check whether the scan resolution is high enough to show all the details in a critical region ("region of interested" claimed)... thus desired that the operator be able to select certain in the scanned image, and be able to view them at the resolution used to scan the original..."*).

12. **Claims 5 and 16** are rejected under 35 U.S.C. 103(a) as being unpatentable over Searby and Liu et al. as applied to claims 1-2, 6-10, 15 and 17 above, and further in view of Baggs et al. (U.S. Pub. 2003/0231801).

With regard to claims 5 and 16, the claim is drawn to the system and the method according to claim 1 and claim 6 respectively. Searby and Liu et al. do not *explicitly* disclose the limitations of detection of the “artifacts” associated with preview images.

However, Baggs et al. disclose the limitations of detecting the presence of visual artifacts (*See Baggs et al., i.e. Claims 1, 23 and “Abstract”*).

Therefore it would have been obvious to one of ordinary skill in the art at the time of invention to have modified the teachings of Searby and Liu et al. to include the limitations of detection of the “artifacts” associated with preview images taught by Baggs et al. It would have been obvious to one of ordinary skill in the art at the time of invention to have the teachings of Searby and Liu et al. by the teachings of Baggs et al. to include the limitations of detection of the “artifacts” associated with preview images taught by Baggs et al., *for improving the quality of a digital image of a document* (*See Baggs et al. i.e. Paragraph [0003]*).

Response to Arguments

13. Applicant's arguments with respect to claims 1-18 have been considered but are moot in view of the new ground(s) of rejection.

Examiner's Suggestion

14. Applicant is respectfully suggested for considering MPEP 2111.06 and MPEP2106 II. C. with relating to *statement of intended use or field of use* which indicates "claim scope is not limited by claim language that suggest or makes optional but does not require steps to be performed, or by claim language that does not limit a claim to a particular structure...", with respect to current claim languages (such in claim 1 among other claims, "a scanner *for...*", "a controller *for...*", "file storage means, *wherein, in use ...*").

Conclusion

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jacky X. Zheng whose telephone number is (571) 270-1122. The examiner can *normally* be reached on Monday-Friday, 8:30 a.m. - 5 p.m., Alt. Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Twyler M. Lamb can be reached on (571) 272-7406. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

16. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jacky X. Zheng/

Examiner, Art Unit: 2625
July 12, 2008

/Twyler L. Haskins/

Supervisory Patent Examiner, Art Unit 2625